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ABSTRACT

A case study approach was used to identify organizational models developed to meet language, literacy, and numeracy (LL&N) requirements underpinning competencies in Australian training packages. Face-to-face and telephone interviews at two metropolitan and two regional technical and further education colleges and three work sites were at the organizational, not delivery, level of the training package qualification. Findings about modes of delivery indicated some program managers and LL&N staff provided LL&N skills training as an underpinning skills "module" run before or concurrently with units of competence; others gave students with LL&N difficulties the option of attending remedial sessions; some programs surveyed enrolled students to determine their skill levels; LL&N staff in some training organizations made available their unused teaching hours to provide short courses or one-to-one teaching to other vocational areas; one program established a learning support unit to teach LL&N skills; some program managers incorporated extra training into existing courses. Motivating factors in providing additional LL&N support were funding, industry needs, preparing to deliver qualifications, and enabling skills to be recognized. Human resource issues were bridging cultural differences, staff training/professional development, and responsibility for training delivery. (Appendixes include interview questions, summary of issues by case study, 10 notes, and a 15-item bibliography.) (YLB)

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Adult Literacy and Numeracy Australian Research Consortium

ALNARC

Organisational Approaches to Addressing Language, Literacy and Numeracy Skills in National Training Package Qualifications

Miles Morgan Australia Pty Ltd

December 2000

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Christine Haines and Christine Owen

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Contents

1. The project 1

2. Background to the project 3

3. Methodolgy 7

4. Preamble 9
- The Course in Applied Vocational Study Skills (CAVSS) 10
- Workplace English Language and Literacy Program (WELL) 12

5. Case studies 15
- Metropolitan case studies 15
- Regional case studies 19
- Workplace metropolitan case studies 21

6. Modes of delivery 25
- Underpinning skills modules 25
- Remedial teaching 27
- Post enrolment surveying 28
- Use of extra resources 29
- Workshops 29
- Incorporation into existing courses 30
- Student-support and course-centred approaches 31

7. Administration issues 33
- Time-tabling 33
- Staff workloads 35

8. Motivating factors 37
- Funding 37
- Industry needs 39
- Preparing to deliver qualifications 40
- Enabling skills to be recognised 41

9. Human Resources issues 43
- Bridging cultural difference 43
- Staff training/professional development 44
- Responsibility for delivery of language, literacy and numeracy training 45

10. Key issues from the research **47**
Measuring outcomes 47
The advantages of co-operation 48

11. Closing remarks **51**

12. Recommendations **53**

13. Appendix 1: Interview questions **55**

14. Appendix 2: Summary of language, literacy and numeracy issues **57**

15. Appendix 3: Units of Competence (in Training Packages discussed) **59**

16. Notes **61**

17. Bibliography **63**

1 The project

This project identifies and documents the organisational approaches that registered training organisations are developing to address the literacy and numeracy requirements underpinning competencies within Training Package qualifications. The project, funded by DETYA, is one of a number being conducted across Australia.

The project follows on from a number of complementary research projects completed in 1999 by state centres of the Adult Literacy and Numeracy Australian Research Consortium (ALNARC). The first round of projects gathered information on the ways in which the incorporation of English language, literacy and numeracy competencies into the competency standards of Training Packages was impacting upon language, literacy and numeracy skills training and assessment in the vocational education and training sector.

It is hoped that through research, such as that presented in this report, training organisations and providers can look at the benefits of 'building in' language, literacy and numeracy skills development and training to mainstream organisational models and culture. In such an environment, vocational education and training lecturers would be more supported in their teaching, and students in their learning.

As in the previous research, some Training Packages are only just coming on line. In some program areas, the delivery of Training Package qualifications has not yet begun and implementation is planned for 2001. In others, Training Package qualifications are in their second year of delivery. Unlike when the first project was undertaken, there are now enough Training Package qualifications being delivered for organisations to be aware of the need to address language, literacy and numeracy competencies.

The Western Australian project has been guided by a Reference Group comprising:

Dr Jennie Bickmore-Brand, Co-ordinator, Academic Staff Development, Teaching and Learning Centre, Murdoch University;

Ms Wendy Sahanaya, Co-ordinator, Western Australian Centre of Adult Literacy and Numeracy Australian Research Centre;

Mr Wayne Muller, Manager, Training Products and Information Services, WA Department of Training and Employment;

Ms Cheryl Wiltshire, Principal Consultant (Literacy), Access and Participation, WA Department of Training and Employment.

2 Background to the project

Training Packages are gradually being phased in as part of the Federal Training Reform Agenda. The Training Package provides an integrated set of nationally endorsed competency standards, assessment guidelines and qualifications for a specific industry, industry sector or enterprise. They consist of endorsed and non-endorsed components.

The endorsed components of Training Packages include:

- competency standards
- assessment guidelines and
- qualifications aligned to the Australian Qualifications Framework (AQF).

Non-endorsed components are an optional part of a Training Package and may vary considerably across industries. Generally, they will include learning strategies, assessment resources, and professional development materials (ANTA 1999: 9).

In 1995, it was agreed by the commonwealth, state and territory ministers for Vocational Education and Training, that language, literacy and numeracy competencies would be incorporated into the competency standards of Training Packages. Much of the research conducted by ALNARC around Australia so far has focussed on the effects of that decision.

Language, literacy and numeracy competencies can be integrated into Training Packages:

- in stand-alone Units of Competence or competency standards (usually Communications);
- in the 'technical' Units of Competence in the Elements of Competence and Performance Criteria (An Element of Competence is what a person needs to do to achieve the Unit of Competence, and a Performance Criteria is what a person must do to achieve the Element of Competence); and
- in the Evidence Guides, including the Range of Variables (the contexts and conditions in which assessment can take place), Critical Aspects (particular knowledge that is essential to performance) and Underpinning Knowledge and Skills of 'technical' units (again essential knowledge and/or skills a person needs to perform work to the required standard).

(WELL 2000: 3)

The previous description outlines the way in which language, literacy and numeracy requirements are evident in Training Packages. It is the responsibility of the RTO to ensure that these requirements are addressed in the delivery and assessment of Training Package units of competence. In addition, every Unit of Competence in the Training Packages has a section relating to the Mayer Key Competencies which cover:

- collecting, analysing and organising information;
- communicating ideas and information;
- planning and organising activities;
- working with others and in teams;
- using mathematical ideas and techniques;
- solving problems, and
- using technology.

Each of the Units of Competence in a Training Package can be customised to suit local need. Whether language, literacy and numeracy skills training is included in the delivery of Units of Competence will depend on the trainer's level of understanding of the capabilities inherent in the Training Package. It will also depend on the capacity of the organisation to bring in language, literacy and numeracy specialists where this is considered appropriate, as well as perceptions of the importance of language, literacy and numeracy skills training, and the level of language, literacy and numeracy skills training perceived as necessary. Many of these issues are influenced by organisational approaches adopted by RTOs to deal with the incorporation of language, literacy and numeracy skills in Training Package qualifications.

Some of the key findings of the 1999 research conducted throughout Australia indirectly concerned the way the delivery of literacy and numeracy within Training Packages was being addressed at the organisational level.

For example, organisational issues which arose from the 1999 research included:

- professional development (NSW, SA, Victoria);
- quality control (NSW, WA, SA);
- budget and funding issues (Victoria, WA);
- time available (the productivity imperative) (Sanguinetti and Hartley 2000: 31);
- relationship of language, literacy and numeracy specialists to industry (Sanguinetti and Hartley 2000: 35);
- development of and access to resources (SA, Qld).

In their synthesis of the research that was conducted across Australia, Sanguinetti and Hartley state that "the findings overall highlight the role that organisational culture plays in determining training and especially literacy and numeracy training outcomes" (p.38). The aim of this report is to contribute to knowledge of organisational culture by examining organisational approaches to the delivery of the language, literacy and numeracy requirements of Training Package qualifications.

3 Methodology

In relation to the provision of language, literacy and numeracy requirements of Training Package qualifications, the onus is on the training provider to:

- identify the language, literacy and numeracy competencies implicit in workplace competencies; and
- develop training strategies for the development of competencies to ensure that students/workers are prepared for their assessment.

This research looks at the second of these requirements. The research was based on a case study approach

> *to identify and document organisational models that have been developed by RTOs in order to meet the language, literacy and numeracy requirements underpinning competencies within Training Packages.*
>
> (Project brief)

The research was based on face-to-face and telephone consultations at two metropolitan TAFE colleges and two regional TAFE colleges as well as three work sites. At the TAFE colleges, researchers spoke to people in key management positions as well as to those staff specialising in language, literacy and numeracy skills training. In these interviews, the researchers were able to identify and then interview directors and program managers who had difficulties in addressing the language, literacy and numeracy requirements arising out of the delivery of Training Package qualifications. At the work sites, the researchers interviewed workplace trainers as well as those with management responsibility for the delivery of training. Recommendations for suitable workplace training sites either came from program managers delivering Workplace English Language and Literacy (WELL) programs, or from an industry training advisory body. The questions which guided the interviews are listed in Appendix 1.

4 Preamble

Various approaches to addressing the literacy, language and numeracy requirements of Training Package qualifications were being developed and trialed at sectoral/program area level within each institution. There were many variations between the way in which each sector/program area, considered across all case studies, were addressing and perceiving language, literacy and numeracy requirements. Variations are a 'natural' aspect of the transition from training to assessment. However, not all variations are positive or necessary when they occur because of lack of knowledge, variations in the willingness to experiment, different levels of management support, and different perceptions of the adequacy of funding levels. This research has found that there was no coherent organisational model in any training institution for addressing language, literacy and numeracy requirements[1].

The General Rules of Training Packages, the WA Competency Based Assessment Framework and Workplace Assessor Guidelines all make it clear that registered training organisations must include coverage of language, literacy and numeracy competencies in the delivery and assessment of competencies in Training Package qualifications. However, the researchers found that many programs were not perceiving or addressing in their training the literacy and numeracy requirements necessary to the delivery of competencies in Training Package qualifications. Program managers were far more likely to be addressing the language, literacy and numeracy requirements of individual students who were perceived to have literacy or numeracy 'problems'. This they saw as extra/additional to the requirements of their course.

Many program managers advised the interviewers that, prior to the advent of Training Packages, they were able to address language, literacy and numeracy skills as part of the particular training they were responsible for, but that this was no longer the case. Some of the comments by program managers reveal the way in which they perceive the embedding of language, literacy and numeracy competencies in Training Packages:

- "There is no language, literacy and numeracy embedded in the Training Package" (Electro-technology).
- "There is no built-in time for language, literacy and numeracy in the Training Package" (Oil and Gas program).
- "The Training Package has no particular strategy for language, literacy and numeracy and no built-in time" (another

Electrotechnology).

- "There is no allowance in the Training Package for study skills as there used to be" (Community Services).
- "There are no language, literacy and numeracy competencies in the Training Package"[2] (Hospitality).
- "We anticipate problems with the Training Package as underpinning knowledge is assumed. We intend to assess workplace communications in all other competencies, but there is neither time nor funding" (Printing and Graphic Arts).

While some program managers recognised the need to address language, literacy and numeracy competencies in Training Package qualifications for all students, others had framed the requirement in terms of providing support to individual students whose language literacy and numeracy skills were seen as 'problematic'. Both strategies are discussed in this research paper, as in many instances there is confusion between the two at the delivery level.

The first approach provides for the teaching of language, literacy and numeracy skills as an integral part of the delivery of Training Package competencies. This approach is discussed in the research as a "course-centred" approach. The second approach, which provides support to individual students, is referred to as a "student-support" approach and is seen by some as 'additional' to required coverage within their course.

The course-centred approaches and student-support approaches, referred to in the case studies examined in this research, are outlined in a diagram following the discussion of the case studies on page 28.

One of the complications of the project was that a program which provides integrated language, literacy and numeracy support to individual students was being piloted at the time that the research was being undertaken. The complication was that the Course in Applied Vocational Study Skills (CAVSS) was perceived by some program managers as a strategy that had been introduced to address the language, literacy and numeracy requirements of their particular Training Package[3]. CAVSS is described below.

4.1 The Course in Applied Vocational Study Skills (CAVSS)

The CAVSS program was piloted and funded in 2000 by the WA Department of Training and Employment. The program provided teaching hours for literacy lecturers to work with students in need of

foundation level language, literacy and numeracy skills support in selected vocational areas.

The CAVSS model is based on a number of essential elements. According to the *Teachers Guidelines for the Implementation of CAVSS* and the (draft) *Business Rules for CAVSS*, the central delivery methodology for CAVSS is team-teaching with a literacy expert team teaching in the training room, or other training environment, alongside the vocational lecturer. The guidelines emphasise that the literacy taught by the CAVSS (literacy) lecturer must be restricted to the language, literacy and numeracy demands of the content and teaching and assessment methodologies of the vocational course. Further, students must not be required to undertake any hours of study or assessments above those required by the vocational course.

The advantage of CAVSS, for the program managers, is that it provides a funding mechanism and an effective methodology for delivering language, literacy and numeracy support. Support is delivered to students who have gaps in their foundation level skills, which, if not addressed, would prevent those students from becoming competent in a range of industry skills. Culturally, the advantage to the institution is that it brings together two very different teaching cultures, and each has a positive influence on the other.

The interviewers found that the coincidence of CAVSS with the early implementation of Training Package qualifications meant that there was some confusion by program managers. In general, program managers did not seem to be making distinctions between their own role in addressing language, literacy and numeracy skills training as part of the delivery of key competencies in the Training Package qualifications and the role of CAVSS. The role of CAVSS is to provide support for the whole training program by providing foundation language, literacy and numeracy skills; not to replace the teaching of core vocational skills. For example, it was often stated that without CAVSS, program managers would not be able to address the language, literacy and numeracy skills essential to the delivery of Training Package qualifications.

The following comments summarise opinions about CAVSS collected during interviews for this project.

- "If you are serious about language, literacy and numeracy then CAVSS is the answer" (To a maths program manager from a language, literacy and numeracy specialist).
- "All sections are worried about the Module Load Output Rate and want to grab a CAVSS program" (Language, literacy and

numeracy specialist).

- "Locating language, literacy and numeracy in the trade area through CAVSS gives literacy and numeracy skills greater credibility with the students" (Academic director).
- "Through the CAVSS program the assessment materials are being rewritten and the lecturers are thrilled" (Comment from Department of Training: this is not the purpose of CAVSS funds).
- "We use CAVSS to see how much language, literacy and numeracy support we are providing and to make sure it increases" (Language, literacy and numeracy specialist).

The other funding program being used in the case studies in the workplace was the Workplace English Language and Literacy Program (WELL).

4.2 Workplace English Language and Literacy Program (WELL)

In the workplace case studies (discussed below) WELL program funding had been accessed. The program was founded in 1991 under the Australian Language and Literacy Policy. Under the WELL program, courses are managed by a tripartite committee involving industry, unions and registered training organisations. In the first year of training under the WELL program, the employer must provide 25% of the funds required to deliver training. In the second year, this rises to 50% of the necessary funds. Employers also contribute by having employees attend in paid work time. In the WELL program, literacy is the ability to read and use written information, and to write appropriately.

WELL outcomes are reported against the National Reporting System (NRS). This mechanism will eventually enable DETYA to report on job seekers' language, literacy and numeracy proficiency at an aggregate level, to identify training gaps and inform future funding. One of the workplace trainers gave feedback on the appropriateness of the NRS reporting system. She stated that the problem with the NRS is that it did not take into account what the company was doing with WELL: "having to report my project under NRS just doesn't do it credit". Her first objective had been to address her work environment: "I was in a sensitive situation where tests would have put people off — my priority was to develop a culture of learning in which they felt comfortable and involved". She added "If NRS were user friendly and showed some sort of results I'd be happy to use it. I'd love some proper measures to have

been put in place...but the NRS just doesn't do it. In my case a good pre-test would have measured morale in the workplace and attitude to learning, because I know from anecdotal evidence that these things have improved dramatically, but I can't prove it and neither can the NRS!" Although this was the only feedback on the NRS, it raises some valid points about program assessment in the workplace, and has been included here for that reason.

5 Case studies

The researchers conducted interviews at the organisational level, rather than at the actual delivery level of the Training Package qualification. They interviewed managers in General Studies, language, literacy and numeracy senior lecturers, and the program managers who were responsible for vocational training (vocational training includes those areas formerly referred to as trades). They also interviewed key management people who had a role that could affect the delivery of Training Package qualifications.

Within the two large, metropolitan, registered training organisations (both public providers) where the researchers interviewed staff, a number of approaches were being trialed. The research found that, where Training Package qualifications were being offered, the way in which language, literacy and numeracy skills were being addressed varied widely. Different approaches were sometimes being used within the same program area, and sometimes within the same Training Package qualification, but in different training organisations.

We also did a select number of interviews at two regional colleges, and these cases studies are discussed below. The workplaces were chosen on the advice of workplace training co-ordinators based in TAFE, or in conjunction with the WA Hospitality and Tourism Industry Training Council. A summary of language, literacy and numeracy as areas of concern is listed in Appendix 2.

5.1 Metropolitan case studies

Case Study 1

In this large metropolitan college, the researchers conducted interviews at three different campuses called, for the purposes of this research, Case Studies 1A, 1B, and 1C. Case Study 1A was the main campus and where the language, literacy and numeracy specialists were centrally located.

At the three sites, the researchers spoke to the language, literacy and numeracy specialists, management, and vocational program managers who were addressing language, literacy and numeracy issues in the delivery of Training Package qualifications in Community Services, Printing and Graphic Arts, Financial Services, Telecommunications, Electrotechnology Industry and Gas Industry Training Packages. For the Units of Competence which address language, literacy and numeracy in these Training Packages discussed in the report see Appendix 3.

The main approaches are briefly described below and discussed in detail later in the report.

- CAVSS was being trialed in the delivery of the Printing and Graphic Arts, Telecommunications and Gas Industry Training Packages.
- The Gas Industry area ran a CAVSS project as a form of competency based assessment.
- In the Telecommunications Training Package qualifications, the language, literacy and numeracy requirements had been identified and were being delivered in a single upfront module. The module was being team-taught using CAVSS as the vehicle. The program manager expected to do the same in the Electrotechnology Training Package in 2001. Entry to the Telecommunications course was structured by interview.
- Printing and Graphic Arts lecturers currently deliver a National Communications module, which is also taught by the 'technical' lecturer — The program manager felt that it was "best taught as part of technical training".
- The program manager for Community Services stated that she had many students with literacy problems, and there was little extra support provided on campus.
- Those offering qualifications from the Financial Services Training Package obtained Department of Employment and Training approval to deliver separate components of underpinning skills which include literacy and numeracy. A language, literacy and numeracy specialist will deliver them in 2001.

In the program areas which were not delivering CAVSS or addressing language, literacy and numeracy as underpinning skills, students were identified individually as having language, literacy and numeracy difficulties and sent for assistance, or they could seek out help themselves. If a program manager had students who 'needed help' they were referred to the Certificate of General Education for Adults (CGEA). They could also attend a centre and learn independently with expertise available if needed, or they could get help specifically tailored to their course or to their assignment.

The main campus, Case Study 1A, had a learning support unit to provide students with general assistance with time management study skills. In 2001 it will address literacy and numeracy skills. Profile funds were being used to fund the workshops. Lecturers will use the time of the

workshops to 'slot' their students in.

At site 1C a one-to-one remedial approach was adopted by lecturers in Community Services who tried to finish twenty minutes early to help students with their writing difficulties. On this site they have Student Service support available for two half days a week. This was considered inadequate by the program manager interviewed, as her lecturers were regularly experiencing students with difficulties constructing written sentences. The program manager for language, literacy and numeracy reported that the main request from other vocational areas was for remedial support, and they had minimal referrals. He stated that communication modules were mostly being delivered by the vocational lecturers themselves.

It can be seen from this discussion that there are two ways in which program managers in this case study addressed the language, literacy and numeracy requirements of the Training Package qualification. The first is as separate Units of Competence, of which the communications module is an example. This can be understood as a course-centred approach. The program managers who gave individual support to students who are perceived to have low levels of literacy and numeracy, rather than building the language, literacy and numeracy requirements into their course, are using a student-support approach.

Case Study 2

Interviews were conducted at Case Study 2 also over three sites. Case Studies 2B and 2C were centrally administrated via site 2A. At the three sites, the researchers interviewed managers responsible for the delivery of the Hospitality, Community Services, Civil and General Construction, Electrotechnology Industry and Information Technology.

- The Hospitality area refers students with difficulties to the General Studies area for assistance. The manager commented that there were few language, literacy and numeracy requirements as the course was mainly hands-on.
- The Community Services area stated that students had literacy requirements that were too difficult to handle as part of the usual teaching of the Training Package qualification.
- The Civil and General construction area is in the second year of a CAVSS program.
- The Electrotechnology Training Package will commence in 2001. Currently numeracy is being addressed through remediation taught two nights a week by lecturers. Numeracy was understood

as essential but "you don't have to read to do the job".

- In the Information Technology area they had introduced a 1.5-hour examination focussing on computer knowledge and mathematics. They stated that they introduced the test because "the Training Package was very vague and general" and that they needed to be more selective.

Site 2A appeared to have the most flexibility in funding their language, literacy and numeracy skills training provision because they operated under a flexible delivery brief. They stated that they provided language, literacy and numeracy skills training for Training Package qualifications through creating a Learning Support Unit for all new students.

Site 2B had a pro-active General Studies area, which had raised the awareness of the management of the college to the importance of providing language, literacy and numeracy skills training to those staff delivering Training Package qualifications. However, as was the case on other campuses, much of the 'on the ground' work was being done by one person effectively acting as a 'champion' of language, literacy and numeracy skills training. As will be discussed, a 'champion' would promote language, literacy and numeracy in relation to the delivery of Training Package qualifications in a number of different ways. In one of two professional development research projects on language, literacy and numeracy that this manager had undertaken, she found that the greatest concern about incoming/anticipated language, literacy and numeracy difficulties came from vocational program managers, rather than traditional trade program managers[4]. Her research accorded with our own observation that in her college "responses to providing language, literacy and numeracy support are entirely sectional".

In her view, not enough was being done to provide language, literacy and numeracy skills training to the traditional trade and vocational areas, and management were not as supportive or informed as they could be. She considered that the provision of language, literacy andnumeracy skills training in the delivery of Training Package qualifications was not considered a high priority by traditional trade areas, or by management. However, through her research and engagement with these traditional areas the situation had improved slightly and she now regularly got calls from traditional trade areas for "remedial support". The requests are another example of how many vocational areas are perceiving language, literacy and numeracy as a student problem, rather than a question of course content which they should be addressing. The Construction area, that she had worked with the most regularly, cited

a 10% increase in retention rates due to the delivery of the CAVSS program. However this was anecdotal evidence, and no actual data existed which would enable the increase in retention to be attributed to CAVSS. The program manager in the Construction area said that CAVSS was being used to fund a full-time literacy specialist for the second year, and about 40 pre-apprentices were being targeted. Strategies included and informal interviews to assess the strengths and weaknesses of the students.

Both sites 2C and 1C complained of limited language, literacy and numeracy expertise. Although expertise did exist on the main campus, program managers at 2C reported that it was problematic that they had no local language, literacy and numeracy specialists on site. The manager responsible for the language, literacy and numeracy area believed it was a problem that language, literacy and numeracy skills were not identified as a separate unit of competence in many Training Package qualifications. He was encouraging lecturers to give their students a language, literacy and numeracy test to ascertain their level of skills. At this site, most difficulties experienced by students were dealt with on a one-to-one remedial basis.

5.2 Regional case studies

Case Studies 3 and 4

Interviews were conducted in two different regional registered training organisations, called here Case Studies 3 and 4. Case Study 3 is a major regional training provider which also demonstrated a pro-active attitude to language, literacy and numeracy skills training. At this site, interviews were conducted with senior management, language, literacy and numeracy specialists, and program managers responsible for delivering the Metal and Engineering Industry, Civil and General Construction, and Hospitality Training Packages.

College policy was described positively by two senior managers as not written but pragmatic, and a strong culture of support was reported. One program manager stated that if you wanted money for language, literacy and numeracy assistance then you just had to ask. Having literacy specialists on-site was described as a competitive advantage for the college. An integrated approach to language, literacy and numeracy skills training had been used at this campus for several years, and was described as a way to measure language, literacy and numeracy delivery. Prior to the introduction of this integrated team-teaching approach,

student difficulties were handled by extra night classes.

- The Metals and Engineering manager commented that support for literacy training had been there prior to the Training Package and this hadn't changed. The manager is also a language, literacy and numeracy specialist. There were no explicit communications modules in the Training Package. Students are encouraged to do an assessment of their underpinning skills before commencing the course, and those that require it are given extra support.
- The Civil and General Construction area said they used the integrated team-teaching model as language, literacy and numeracy were a big issue in the early stages — pre-apprenticeships, traineeships and first stage apprenticeships. Numeracy and communication skills are flagged as important by industry. The manager thought literacy should be a specified entry requirement, as written skills were necessary to understand the theory of the course. A survey undertaken in her area showed the literacy difficulties to be far higher than she had expected.
- Researchers were referred to the Hospitality vocational lecturer and literacy specialist (team teacher). The vocational lecturer stated that they had no time to be teaching underpinning skills and that the Training Package assumes students already have the knowledge. The literacy specialist stated that Certificate IV students needed help presenting their work, writing reports and that she had given a lot of numeracy help — basic calculations, financial transactions and accountancy — to students. She had also rewritten assessment materials into plain English. Neither lecturer supported pre-assessment as they thought students would not co-operate.

Case Study 4 was a minor study that built on earlier research and interviews conducted in last year's project regarding language, literacy and numeracy skills training. The researchers spoke to the program manager delivering Certificates 3/4 Hospitality, and Certificate 3 Commercial Cookery, as well as to the manager responsible for providing language, literacy and numeracy across the campus. The Hospitality manager stated that a problem in this area with addressing language, literacy and numeracy requirements was the small number of students enrolled in their courses. In some cases this has led to the sharing of resources with other programs, for example, computing. The language, literacy and numeracy specialist reported that there was no management policy, and they addressed low levels of language, literacy and numeracy

skills on an individual basis. The RTO is piloting CAVSS in the delivery of Electrical Supply Industry Training Package qualifications.

5.3 Workplace metropolitan case studies

Case Studies 5, 6, and 7

The researchers held interviews at three different workplaces to look at the delivery of language, literacy and numeracy in Training Packages. Only Case Study 7 was itself a registered training provider. The delivery of training at the other two was provided by TAFE. The workplace case studies were as follows:

Case Study 5

This food processing work site has about 270 employees, about half from a non-English speaking background representing 35 different countries. Most of those in training are process workers. Although many left school early, about thirty of the workers have post-secondary qualifications, and about forty are competent in more than one language (other than English). Nine of them speak three languages and one speaks four.

At the work site they employ one enterprise-based lecturer, and two part-time trainers who deliver the Food Processing Training Package Certificates II (leading hands and motivated workers), III (Supervisors), and I (general workers). The majority of the workers are taking Certificate I. Assessors and trainers were also being trained as part of the Workplace Assessment Training Package. The workplace trainer stated that this Training Package requires the trainer to address language, literacy and numeracy as part of their code of ethics.

Language, literacy and numeracy skill training is being provided to support the delivery of the Training Package qualifications through the WELL program. Groups such as cleaners are paid to come in when training falls at a different time to their shift. At the initial interviews participants were also asked what kind of training they would like to do. Most chose computer training, which is organised after hours, in their own time. Employees in need of language, literacy and numeracy skills training were identified in the initial fifteen-minute interview process. Training sessions are held four times a week for these employees and are called Pre-Certificate 1 to acknowledge that they lead into standard Training Package qualifications. When the participants consider

themselves ready, they can join the mainstream training program. The workplace trainer recognised that one or two older ESL participants would probably never wish to upgrade their training as they were close to retirement.

Prior to delivery of the Training Package qualifications, the only training had been two short courses on Best Practice and Safety. The Human Resources manager considered that little had been learned in these courses because there was no training culture, and because of language difficulties. On the basis of this experience, she instigated the language, literacy and numeracy program. She stated that she had seen the benefits of such a program at her previous workplace and wanted to change the culture of the organisation from one of passive workers, to one of individual responsibility and negotiation.

Training to date had covered occupational health and safety, food hygiene, oral and cross-cultural communication, rewriting of assessment materials, and developing resource materials. Time had also been spent on making sure that employees understood basic human resource documents, such as the employment contract, disciplinary policy and sexual harassment policy. Discussions were also held on problems in the workplace, such as drug use.

In order to understand the students' needs, the workplace trainer had spent time on the production line. She stated that she had learnt how monotonous and physically tiring the work was. In the training room this meant that she had to keep the activities lively and mentally stimulating. One of the selling points for management of investing in the Training Package qualification was that it helped them to hold on to staff.

Case Study 6

This regional case study delivers qualifications from the Extractive Industry Training Package. There are about ninety people involved in the training. Most of the participants have little formal training or schooling. There are no non-English speaking background migrant employees. Certificate I and Extractive Industry Certificate II and III (Operator) are being taught. According to the workplace trainer, only those at Certificate I need assistance with their language, literacy and numeracy skills. These employees self-elected for assistance at the initial interview, and it is expected that more will do so once they have confidence in the trainers. Progress is very slow due to the shiftwork nature of the industry. The employees do five day shifts, five night shifts and then have five days off. Four people are released from a shift at a time. Training has only recently

begun, and they have commenced with a Communication Unit of Competence and a Communication elective. The problem of shiftwork means that training is slow, and for the employees, there are long periods between training sessions. It is anticipated, for example, that the communications training could take nine months to complete.

Case Study 7

This work site training provider is introducing Certificates I to IV of the Hospitality Training Package, and is running the Workplace Training Assessment Certificate IV. The Certificate II traineeship in Hospitality will be ready to offer soon, and Certificate III for Floor and Shift supervisors is ready to be offered, but must wait for Certificate II to come on line. Previously, most of the training at this case study was unaccredited. The training is conducted at a number of regional sites across Western Australia. They began their involvement with accredited training when they were taken over by a larger national organisation that was also a registered training provider. The Human Resource Manager stated that the Human Resource division of the new and larger group had good knowledge of accredited training, and this had helped her in introducing the Training Package qualifications. The impetus to be involved came from the need to retain staff in country regions, and the company's goal to lift and standardise the delivery of service at all their sites.

The bulk of the company's problems with low levels of language, literacy and numeracy skills arose in the area of Housekeeping, where a large number of non-English speaking migrants are employed. They are trained in providing customer service, and so need to be confident in basic communication. The trainers avoid using teaching materials with text, and where necessary existing materials are rewritten in plain English. For example, they must be trained in occupational health and safety theory, and some of the learning materials have had to be rewritten in plain English. Text-based learning is also necessary in the teaching of health and hygiene. To train the employees in lifting techniques, the teaching is done using diagrams and demonstration and assessment on the job. The company ensures that all written tests can also be taken verbally. ANTA has provided them with lists of preferred suppliers for assistance with translating and interpreting, as well as language, literacy and numeracy specialists. They also have an Aboriginal contact person in each of the regions, and contacts to assist them with the visual and hearing impaired.

6 Modes of delivery

6.1 Underpinning skills modules

Some program managers and language, literacy and numeracy staff are providing language, literacy and numeracy skills training as an underpinning skills 'module' run before or concurrently with Units of Competence. In Case Study 1B, the Telecommunications Training Package qualification was delivered in this way.

The program manager decided that, as each of the six Units of Competence had basic skill components in language, literacy and numeracy, maths and analytical skills, they could be taught in one 'upfront module'. He took these aspects of each of the six Units and created one 'module' taught by a vocational lecturer, together with a language, literacy and numeracy specialist. The combining of aspects of the six Units of Competence to create one 'underpinning skills training module' agrees with the recommended approach discussed earlier, in which language, literacy and numeracy competencies are understood as an essential part of the Training Package qualification. This is, in other words, a course-centred approach. The course was taken by the students as the first of their Telecommunications modules, and addressed language, literacy and numeracy underpinning skills in relation to the Telecommunications qualification. The literacy lecturer was funded by teaching hours generated by CAVSS enrolments.

The student intake from two different courses was combined to make the underpinning skills' module' more economically viable. Students from two different certificate levels were combined to undertake the 'module', making a total of 35 students. About half of the Telecommunications students dropped out during the course (in the time allowed to withdraw with no penalty). It was not clear whether the class size itself had caused problems for students with language, literacy and numeracy difficulties.

The manager felt that the low retention rate was either because students were not doing the course they expected to do, or because the Telecommunications course itself was not for them. The students who remained in the course continue to be successful. The program manager suggested that those who continued in the course may not have needed extra tuition in the underpinning skills, because they were all year 12 students. However, as other managers pointed out in the research, Year 12 students do not necessarily have the appropriate level of language,

literacy and numeracy skills for the course they are taking, particularly if they did not take maths at the Year 12 level. As is typically the case when students leave a course early, it was not possible to do exit survey interviews to determine their reasons for leaving.

In Case Study 2C, another program manager organised an 'upfront underpinning skills course' to be taken by students. On this occasion, the course was funded from within existing funds. There was also a high drop-out in this 'course', and the program manager felt that this was because the course was not what the students expected. His view was that "They probably expected hands-on work — not going back to school". He said he would not be repeating the approach. The Department of Training and Employment comment here that it is important to teach literacy, language and numeracy skills in a manner which respects people's work and life backgrounds, that does not impose academic practices, and integrates learning with vocational goals.

For this program manager, 'underpinning skills' referred to the language, literacy and numeracy skills necessary to undertake the course. Generally speaking, in Training Package qualifications, underpinning skills refer to the generic skills that are necessary across Units of Competence (such as knowledge of developmental stages of children for childcare competencies). These underpinning skills are not usually assessed explicitly as Units of Competence[5].

In neither case was there any data available on why the students dropped out. In the second case, the drop-out rate dissuaded the program manager from repeating the approach. Because the course required only a rearrangement of the way elements of competencies were delivered (upfront instead of within each Unit of Competence), and did not therefore require extra hours, then the course could be delivered within existing funds. There is not enough evidence to suggest that an underpinning skills module would be appropriate for all Training Package qualifications. The information given above is to raise awareness of underpinning skills modules as an option for trainers. In discussions, the researchers found that other program managers were not generally aware that they could deliver a range of competencies in one underpinning skills module.

It was not unusual in the interviews for program managers to make reference to the fact that their interpretation of the delivery of Training Package competencies had been wholly guided by their previous model of delivery.[6] For example, in the Financial Services Training Package in Case Study 1A, the program manager was preparing to deliver language,

literacy and numeracy skills training as a separate component covering the underpinning skills included in the Units of Competence. The underpinning skills taught in this particular program area included maths and communications, as well as literacy and numeracy skills. Prior to Training Packages, training in this area had allowed for separate modules of maths and communication skills, and this had influenced the program manager's choice of delivery. The program manager considered that the previous model had been very successful. When he examined the Financial Training Package qualifications, he saw that the Training Package allowed him to rearrange the elements of competency to provide for a similar underpinning skills module. All students would take the underpinning skills modules, covering maths and communications in 'modules' which would be 30 to 50 hours long. Permission had been sought from the Western Australian Department of Training and Employment to deliver the Training Package qualification in this way. The manager took the view that the components did not change what was being delivered in the Training Package qualification, and so could be delivered within existing funds. The majority of the program managers who were interviewed did not hold this view on the funding of language, literacy and numeracy skills training.

For most program managers, if language, literacy and numeracy skills were not made explicit in the Training Package, then they were not addressed. These managers felt that the Training Package funds were only sufficient to address components that were explicit in the Training Packages. These did not include language, literacy and numeracy skills because they perceived that these skills were no longer explicit in the Training Package.

The view/misconception that language, literacy and numeracy skills training could not be addressed within existing funds came up frequently in interviews. It is considered that RTOs would benefit from further advice and guidance from the Department of Training and Employment on this issue.

6.2 Remedial teaching

In Case Studies 2B and 2C, students with language, literacy and numeracy difficulties were given the option to attend remedial, or remediation sessions if they do not pass their exams. In Case Study 2B, this was considered the cheapest option, and had been used by

hairdressing, electrical and construction areas. In both case studies, after the students had taken the extra training sessions, they could be reassessed in the competency that they had not achieved. In all instances, remedial courses were taught by the lecturers with technical expertise in their industry, rather than by the language, literacy and numeracy specialists. One program manager described this as his sole strategy for addressing low levels of language, literacy and numeracy skills. There was no data available on the success rate of these extra training sessions. This approach is clearly a student-support approach.

6.3 Post enrolment surveying

In some cases, students were being surveyed after enrolment, but prior to commencing their course, to determine their language, literacy and numeracy skill levels. The voluntary survey does not exclude students from continued participation in the course, but does provide early identification of potential difficulties in delivering Training Package qualifications. This approach is student-centred as it aims to identify and then address areas of strengths and weakness in the student cohort, rather than focussing on an integrated course wide approach

In Case Studies 3 and 1B, the language, literacy and numeracy managers chose to survey students after enrolment to see what skills may cause difficulty later in their courses. The language, literacy and numeracy specialists were then able to advise the lecturers that they had, for example, a certain number of students with poor writing skills. The lecturer was then encouraged to use the language, literacy and numeracy resources of the college to address the difficulties early in the course. In this sense the survey also worked as an effective marketing tool for the language, literacy and numeracy area.

Surveying students post enrolment is also a pro-active approach for the language, literacy and numeracy specialist. As one director expressed it (Case Study 3), surveying the students allowed her to direct her resources more efficiently and effectively. At another RTO site (Case Study 1B) an investigation into computerised surveying was being investigated. In Case Study 2A, the program manager "used to have language, literacy and numeracy problems" because the Information Technology Training Package qualification was "too vague and general". Now they have a 1.5 hour pre-enrolment survey that is used to stream students into the appropriate certificate level. It is difficult to comment on this approach, as it was not clear whether this replaces the provision of

language, literacy and numeracy skills training.

It is suggested that selected institutions be encouraged to investigate, trial and monitor the approach of surveying students (post-enrolment but pre-Training Package qualification delivery) to establish language, literacy and numeracy skill levels.

6.4 Use of extra resources

In some training organisations (Case Studies 2C and 1A), language, literacy and numeracy staff made available their unused teaching hours to provide short courses or one-to-one teaching to other vocational areas. In most instances, this approach was planned and promoted by the language, literacy and numeracy specialists. One of the problems with this approach is that it relies on the traditional trade and vocational lecturers being aware of language, literacy and numeracy requirements contained within Units of Competence, and to have a planned approach to dealing with them. This was not always the case. For example, in one instance, after the language, literacy and numeracy specialist had repeatedly offered help to the program managers, one program manager realised two weeks before the end of the course that the students might fail the course, because they did not know how to write reports. On another occasion, a last minute request for a short intensive course necessitated complicated time juggling by the language, literacy and numeracy specialist, and ultimately failed when no students attended the course. As this discussion suggests, the use of extra resources can be used to support either a student-centred approach, or a course-centred approach.

6.5 Workshops

In Case Study 3, a learning support unit had been established which would teach language, literacy and numeracy skills in the following year. At present it was delivering a unit in time management study skills. Three workshops were being held for all new students. Those responsible for conducting workshops in language, literacy and numeracy next year stated that they might have to change the delivery mode. The manager thought that the current workshop format may prove unsuitable, as it was thought that 'more hand-holding' may be necessary for language, literacy and numeracy skills. The workshops were covered by the resource fees paid by students. Workshops were used to support individual students and to support course activity, such as report writing.

6.6 Incorporation into existing courses

Many of the trainers and managers interviewed stated that to single a student out for assistance, and then to send them to another part of the organisation to get that assistance, was the worst option possible. When this occurred the student was stigmatised as needing extra assistance. Then the risk was that the student would not attend the extra session or stay enrolled in the course. However, in all case studies, the student would be directed to such remedial assistance when it was thought to be required, and where the numbers of people needing assistance was small.

Case Studies 2C and 1C had the poorest levels of language, literacy and numeracy service. In Case Study 2C, students needing extra language, literacy and numeracy skills training were sent to the English as a Second Language (ESL) program, or to the CGEA program. The program managers interviewed thought that the problem with this approach was that students had to pay for this assistance, and therefore often didn't take it. They also recognised that again there was a stigma attached to being singled out for extra language, literacy and numeracy training.

In Case Study 2C, language, literacy and numeracy difficulties were being experienced in hospitality, electrical engineering, health and community services. The program manager responsible for providing language, literacy and numeracy skills training stated that, since language, literacy and numeracy skills had been embedded in Training Packages, program managers had not been identifying language, literacy and numeracy needs. Recently he'd had language, literacy and numeracy specialists talking to managers to help them identify students experiencing difficulties achieving the language, literacy and numeracy competencies.

In Case Study 4, students who were undertaking Training Package qualifications, and experiencing language, literacy and numeracy difficulties were sent to participate in the Level 3 'General Curriculum Option' of the Certificate of General Education for Adults. The program manager felt that the generic name of the option helped remove any stigma associated with receiving language, literacy and numeracy assistance.

A program manager delivering a Gas Industry course referred to the stigma presented when adults need assistance with language, literacy and numeracy skills. He stated that:

because of the sensitivity of the issue, when the CAVSS program

> *came on board, we said it was a form of competency based assessment and they did work on interviews and resumes. We also did practical exercises relating to the course... through this process we were able to pick up problems early.*

In this instance CAVSS was being used to detect as well as resolve skill gaps. It also suggests that, when a program of assistance is requested, it is perhaps only its delivery that indicates the full extent of the language, literacy and numeracy skill requirements.

6.7 Student-support and course-centred approaches

There is a range of models for developing the language, literacy and numeracy skills of students. The following ANTA classifications illustrates possible approaches:

- the **language support** model: where the expert is used to support the trainer/trainee between sessions and in completing any follow-up tasks.
- the **team-teaching** model: where the language expert works together with the 'content' expert in the classroom.
- the **language expert working alone** model used for stand-alone communication skills Competency Units.

(ANTA 1999: 49)

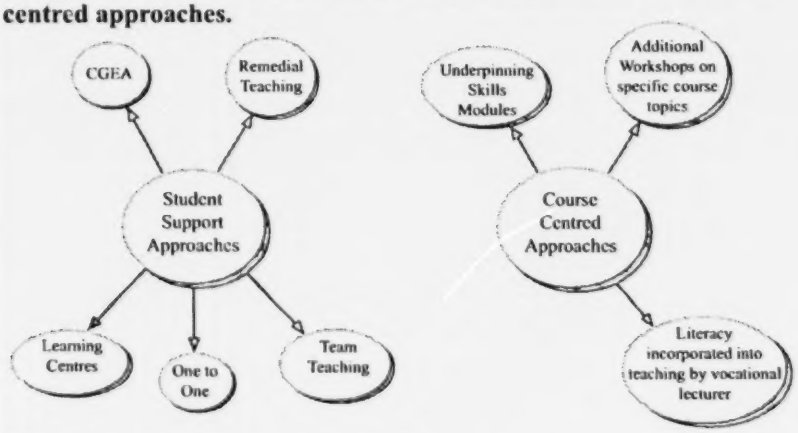
In examining the approaches adopted by training providers, it was clear that the provision of language, literacy and numeracy skills training fell into two groups. The first group of approaches can be understood as student-support, in that they addressed individual problems that arose in the delivery of the course. The second group of approaches were course-centred, in that they addressed language, literacy and numeracy skills in the delivery of training.

If a program manager does not address language, literacy and numeracy skills in the Units of Competence, he/she may have to address language, literacy and numeracy skills difficulties as they arise — in this case student-support approaches are taken. If a program manager aims to address language, literacy and numeracy skills training as an essential element of the Training Package qualification, then she/he would address the problem on a course basis. This is generally a planned approach prior to course delivery. There were more student-support approaches evident in the interviews conducted with training providers, and this suggests that

more work needs to be done to promote the language, literacy and numeracy requirements inherent in the Training Package model.

Many program managers expressed the view that it was too difficult for lecturers to address the embedded language, literacy and numeracy competencies. The length of time necessary to address language, literacy and numeracy skills was the most frequently cited impediment. The overall impression given by program managers regarding language, literacy and numeracy skills, in relation to Training Package qualifications, was that the lower level of schooling the more likely it was that the students would have language, literacy and numeracy skill difficulties. This was particularly the case in relation to numeracy. As one program manager, in a science and technology area, put it "students can get by with poor written skills but they won't pass without numeracy." Another program manager pointed out that even a year 12 student may not have passed maths at that level, or done the type of maths necessary for the course.

Figure 1. A comparison of student support approaches with course centred approaches.



Student Support and Course Centred Approaches to Literacy Language and Numeracy Skills Training in the Delivery of Training Package Qualification

Note: CAVSS is the only model in operation at the current time and exists to provide training-based literacy support.

7 Administration issues

7.1 Time-tabling

In programs which were not using the CAVSS team-teaching model, time-tabling arose as an important issue. It is the researchers' understanding that what was perceived as a time-tabling problem can be attributed in part to the low priority accorded to language, literacy and numeracy skills training. The issue discussed earlier, where vocational program areas were not organised enough to take advantage of the language, literacy and numeracy specialists' extra teaching hours, is a possible case in point. A director of a language, literacy and numeracy area in Case Study 1A stated that in her organisation, extra language, literacy and numeracy support sessions were typically scheduled for Friday afternoons, creating a problem for the limited number of casual language, literacy and numeracy lecturers on her staff, and presumably for the students. The Department of Training and Employment also has had informal feedback that students with family responsibilities are unable or reluctant to attend literacy sessions in this time slot.

The lack of time to deliver language, literacy and numeracy skills was also raised in interviews. In Case Study 2B, it was reported that not enough time had been allocated to the teaching of technical competencies "let alone anything else". Against this, departmental staff suggest that there is enough flexibility in the Training Package qualifications for an RTO to change the training delivery arrangements, to ensure time for the teaching of underpinning skills such as language, literacy and numeracy within the teaching of technical competencies. The researchers' observe that perhaps the tension between the two positions is because program managers perceive that the level of language, literacy and numeracy difficulties experienced by students as greater than can be addressed in the teaching of 'technical competencies' or 'underpinning skills'.

Workplace training also experienced time constraints. In one workplace (Case Study 5) it was requested that no training sessions be held in 'short' weeks, that is, those weeks with a public holiday. The workplace trainer agreed to this request, seeing it as an opportunity to gain more support from the supervisors through demonstrating flexibility and co-operation. At this work site, half the factory attends training sessions at a time for a four week block, as only one or two people can be removed from a section at a time. Each person attends training for two hours each week in groups of no more than twelve people. One group of

cleaners is paid overtime to come in two hours earlier to attend training sessions. Time-tabling understandably proved to be very complicated at this worksite, and again management provided the extra resources to assist.

> *Organising the timetable required the time management skills of an Olympic Opening Ceremony organiser. Fortunately these skills were readily available in one of the supervisors...[She] had worked in the factory for ten years and worked her way up from the factory floor.*

An even more difficult situation arose in Case Study 6 where three twelve-hour shifts operated around the clock. As the trainer is only available during the day, and as only four workers can be released from a shift at a time, there are long periods between training sessions for the workers. The suggestion from one of the company managers was that the trainer also works a twelve-hour shift. The trainer felt that this demonstrated a difference in work cultures and may also show a lack of understanding of the demands of teaching. As the trainer put it:

> *operating a fork lift truck for twelve hours is not the same as trying to teach a class of dog tired workers some of whom haven't been in a classroom for twenty years.*

However, as the trainer from Case Study 5 understands it, the workplace itself is always the key point of comparison:

> *I can't even pretend to have too much work to do. Compared to what everyone else does around me I look extremely pampered.*

The above examples are given to demonstrate the ways in which cultural differences between training and the work environment can be manifested in the workplace. They don't necessarily lead to organisational problems, but can cause pressure on individual trainers and present points for negotiation.

In the 1999 report on the food processing industry, it was found that the literacy-related work of the enterprise-based teachers was constrained by the limited time available and the productivity imperative (Sanquinetti: 1). This is certainly the case at Case Study 6 (discussed in the preceding section) where shift work predominates. In the other two workplace sites, time and productivity do not appear to cause undue pressures because a training culture has been developed over time, and the training has full management support.

7.2 Staff workloads

It was evident that, in Registered Training Organisations where a training culture had been developed that was inclusive of considerations of language, literacy and numeracy, then individual 'champions' working with supportive management were often responsible. However, an individual 'champion' working with a passively supportive management had more difficulties. This was particularly the case when there has been no explicit policy developed to deal with language, literacy and numeracy requirements, that are now embedded, and therefore sometimes 'invisible' to lecturers who are used to delivering traditional technical occupational skills. Indeed, in Case Study 1B, a program manager was told that while his particular language, literacy and numeracy initiative had management support, he had to get the support of lecturers. The initiative was to create and undertake an online survey of enrolled students to determine their level of necessary underpinning skills. Lecturers rejected it, as they had other similar initiatives, on the basis that it was a cost-saving measure. A management policy advocating the importance of addressing language, literacy and numeracy requirements may ensure that such suggestions receive more constructive appraisals. It is possible that resources could be wasted as each program manager individually discovers ways to approach the language, literacy and numeracy requirements of the Training Packages if mechanisms are not in place to share such information.

The amount of time involved in addressing language, literacy and numeracy issues, within the organisations interviewed, was usually raised only by those understood to be 'champions' of language, literacy and numeracy support. These 'champions' were easy to identify as everyone, including staff in senior management positions, referred to their work. On a day-to-day basis, they tended to have less management support than they would like, and often worked alongside staff who did not have a corresponding level of commitment. This made their work unnecessarily difficult.

The workplace trainers also tended to be very committed to their work, and their interpretation of what needed to be done in order to develop language, literacy and numeracy skills often led to additional work. The general impression of the need for language, literacy and numeracy skills training was that it was 'an untapped well', which could use up many more hours and resources than were currently available.

8 Motivating Factors

8.1 Funding

Funding presents difficulties and possibilities, restraints and encouragement to those receiving it or in need of it. Additional (foundation) language, literacy and numeracy support is provided by programs, such as CAVSS and WELL. As discussed, it is expected that the development of language, literacy and numeracy competencies required in Training Package qualifications be funded from mainstream allocations. However many program managers in the colleges expressed the view that they needed funds, additional to those allocated to their own program area, in order to address language, literacy and numeracy skills training.

Several different approaches were evidenced including:

- the allocation of college funds directly to language, literacy and numeracy areas (General Studies) to provide a free service to other vocational program areas as required;
- the purchasing of assistance from language, literacy and numeracy programs (General Studies) by other vocational program areas where these areas need assistance teaching language, literacy and numeracy competencies;
- the allocation of college funds to vocational program areas (other than General Studies) on a 'needs' basis for language, literacy and numeracy skills training;
- the provision of language, literacy and numeracy skills training via student resource funds;
- the provision of funds via the CAVSS program for literacy and numeracy support;
- the provision of funds by DETYA via the WELL program to workplace programs;
- the funding of language, literacy and numeracy skills through existing vocational program funds using existing vocational staff for the delivery of Training Package qualifications;
- the funding of literacy, language and numeracy support via the CGEA or ESL programs.

Representatives of the WA Department of Training and Employment have indicated that there is sufficient flexibility within funding allocations for the delivery of all competencies, including language, literacy and numeracy skills. However, most of the training providers interviewed for

this project seemed to be of the view that additional sources of funding had to be found, and without them they could not adequately address language, literacy and numeracy within the delivery of Training Package qualifications. This perception is, of course, related to the other common perception of training providers, which is that there is no provision for language, literacy and numeracy skills training within the delivery of Training Package qualifications. Both misconceptions are major barriers to the effective delivery of language, literacy and numeracy skills training, and must be addressed appropriately by the Department.

It is recommended that the Department of Training and Employment continues to provide advice and information to RTOs on ways to address language, literacy and numeracy skills within the funding allocated for the delivery of Training Package qualifications.

Two other funding factors were seen as motivators to provide language, literacy and numeracy support to Training Packages. The first was the Module Load Output Rate (MLOR)[7] and the second, the Invalid Module Enrolment Rate. A professional development research project conducted by one of the language, literacy and numeracy specialists in Case Study 2 found that, of the thirteen programs which were surveyed, eight stated that they thought students experiencing difficulties with language, literacy and numeracy skills would directly affect their MLOR[8]. The MLOR is used to adjust college funding, according to successful course completions.

Additionally, the college administration must provide evidence of student enrolment, or the college will be penalised under the Invalid Module Enrolment (IME) rate. The IME rate is a component of the national AVETMISS data collection protocols. IME rates are identified as a result of audits, which investigate those students who are not successful at the module level, to ensure that the student had agreed to study (by enrolling and paying a fee), and had participated in the module (by attending class or submitting work). The TAFE colleges are not funded for students who are identified as an invalid enrolment at the module (or Unit of Competence level).

Some program managers stated that because of student withdrawals, some program areas were taking on students who lacked the necessary prerequisites for the course. In their view, this had possibly increased the number of students in need of language, literacy and numeracy support, and these programs risk being penalised under the

Module Load Output Rate if students later withdraw because of their low level of language, literacy and numeracy skills. Research conducted by the language, literacy and numeracy specialist in Case Study 2 examined program manager views on the provision of language, literacy and numeracy skills. Her report stated that there is general concern among program managers that more and more students were entering courses with low levels of language, literacy and numeracy skills, and they tended to be Year 10 leavers. Some program managers in the interviews conducted for this report stated similar views.

Only a longitudinal study that assessed the entry-level language, literacy and numeracy skills of students would be able to ascertain whether these views are accurate. However, as the *Teacher's Guidelines* for CAVSS state, on a broad level it is recognised that "many VET students have a literacy and/or numeracy skills gap."

(Bates 2000: 1)

8.2 Industry Needs

The language, literacy and numeracy manager in Case Study 1A stated that her efforts in encouraging lecturers from other program areas to consider the language, literacy and numeracy requirements of Training Package qualifications were made easier by employers at industry forums. Employers made it clear that they wanted literate employees with good communication skills, and often numeracy skills. Her point was that this was a strong voice that lecturers took notice of, because they recognise that positive relationships with industry are essential to the successful delivery of Training Package qualifications. Industry standards guide the development of Training Package qualifications, however, some of the program managers expressed concerns that some students do not have the appropriate language, literacy and numeracy levels necessary for their chosen industry.

In the Childcare sector, one program manager in Case Study 2A, said that she had students who were competent at childcare, but that their level of language, literacy and numeracy (including communication), which already created learning difficulties in the classroom, could cause bigger problems in the workplace for themselves and others. As a different program manager stated (teaching in the same area in Case Study 1C)

> *we teach report writing skills but we have to finish classes twenty minutes early to address the problem that some students cannot*

> *construct a sentence. It is not possible to teach this level of language, literacy and numeracy as part of the Training Package. We need extra time and resources.*

The first program manager, from Case Study 2A, suggested that there was a high demand for fully qualified childcare workers in the industry, and that this meant her graduates were often in supervisory positions within twelve months. Her concern was that in a highly regulated industry in which employees also often needed management and business skills, the lack of good communication, language, literacy and numeracy skills was potentially "quite dangerous". In her view it was not possible to deliver the level of language, literacy and numeracy skills training required by her students within the Training Package qualification due to time constraints.

8.3 Preparing to deliver qualifications

In many vocational program areas, the impetus to address language, literacy and numeracy skills came after problems had arisen in the delivery of Training Package qualifications, not when they were preparing programs of study. For example, the research found no instances where specialist assistance had been requested with the initial interpretation of Training Package requirements. It is our observation that Elements of Competency risk being narrowly interpreted if language, literacy and numeracy specialists are not consulted. A collaborative approach would enable the language, literacy and numeracy specialist to encourage program managers and lecturers to think about what is required in the achievement of competencies. At present many program managers seem to depend largely on their experience of delivering modules prior to the introduction of Units of Competence in which language, literacy and numeracy competencies have been embedded.

> It is recommended that the collaboration of language, literacy and numeracy specialists with other vocational education lecturers, in the preparation for and review of Training Package qualification delivery be encouraged.

It is the researchers' impression that collaboration between language, literacy and numeracy specialists with other program areas, as they prepare Training Package qualifications, would be welcomed as long as the assistance offered was timely and useful. In many cases, such

collaboration has already taken place with language specialists rewriting assessment materials into 'plain English' for other lecturers.

8.4 Enabling skills to be recognised

At the work site in Case Study 5, studying, or undergoing assessment of competencies to gain a nationally recognised qualification was understood as a boon, because it got workers interested in training, and brought them into contact with language, literacy and numeracy skills training.

> *Our selling point was definitely the Training Package. I explained how one qualification can lead to another and I was surprised by the positive reaction this provoked. Some people had given up all thoughts of "making it" in education. Some saw no point in making it anyway. To discover that they could be qualified in what they did already brought the issue of education closer to their experience.*

For many of these workers it is their first qualification, for some it constitutes an alternative path as their own qualifications are not recognised in this country. At this site, communication competencies addressed the tensions that build up when people from a range of different language and cultural backgrounds work closely together.

> *The main lack of understanding revolved around the NESB workers speaking in their own tongue to each other. English speakers find this very threatening...I ran a session where all the groups in turn role-played going to Japan to work without knowing how to read or speak Japanese...the NESB workers reported an increase in support and the English speakers an increase in understanding...*

The Human Resource manager reported that since the communication training there has been a substantial reduction in the number of people visiting her office with conflicts for her to sort out. It is also likely that improved communication led to direct benefits to productivity.

Case Study 5 is a successful program initiated by the Human Resource Manager acting as a 'champion' of language, literacy and numeracy skills. Her support came about due to her previous experiences in the food processing industry. She secured WELL funding initially to address language, literacy and numeracy skills training in relation to occupational health and safety issues. Together with the Workplace Trainer, an experienced trainer who has written two papers on the company's program, the company has now implemented a very

successful program which delivers Food Processing and Workplace Assessors Training Package qualifications.

It is suggested that the work being done in the workplace in Case Study 5 be documented in leaflet format and disseminated in order to promote the benefits to employees and employers of providing language, literacy and numeracy skills training where Training Package qualifications are being delivered in the workplace.

9 Human Resource issues

9.1 Bridging cultural differences

The General Studies program area and other program areas, such as the traditional trade and vocational areas, typically have very different cultures. This obviously affects the ability of the language, literacy and numeracy specialists to promote their services. Because of this, some of the language, literacy and numeracy staff in Case Study 1A maintain contact with other program areas through attending program managers' meetings and through developing networks. In Case Study 3, interaction was encouraged through having shared recreational amenities. One of the language, literacy and numeracy specialists in this case study said that, as other lecturers got to know them better, the stereotype that language, literacy and numeracy skills training was for "dumb kids" was breaking down.

The success of these activities ultimately rested with the willingness of the language, literacy and numeracy specialists to take action to market their services, and for program managers to utilise the language, literacy and numeracy expertise that was available. In one instance, Case Study 1A, funds were offered to two program managers who had students experiencing language, literacy and numeracy difficulties. The offer was declined and no reason was given.

Although reports in general note the cultural divide between language, literacy and numeracy areas and the traditional trade and vocational areas, there is also evidence that the differences are not insurmountable and can be productive. The CAVSS model itself, by bringing together the two specialisations to deliver training, has shown that great benefits are possible. Program managers who used the CAVVS program spoke positively about the exchange of experience and information that has occurred in the delivery of CAVSS.

Going further than this, some colleges have addressed the issue of differing cultures from a human resources perspective. In Case Studies A1 and 3, colleges have put General Studies program managers (responsible for language, literacy and numeracy skill support) in charge of other vocational programs. In another instance, a vocational lecturer was acting General Studies program manager. In each case the benefits from such cross-fertilisation were obvious, in that the program managers were all well informed about the importance of linking the two areas. In one instance, a Hospitality program area was entirely unaware of what

was on offer, in relation to language, literacy and numeracy, until a specialist acted as program manager for a short time. This program area is now in the second year of delivering language, literacy and numeracy skills training in their area.

Another traditional trade area had a language, literacy and numeracy specialist as program manager because, after working in the area delivering language, literacy and numeracy skills training, she was recommended by the previous manager. The previous manager was trade qualified and sensitive to language, literacy and numeracy difficulties because he had worked in labour market areas on behalf of disadvantaged groups. In the current manager's view, her experience of the two fields was very useful, as she was able to assist the vocational lecturers to recognise and address the language, literacy and numeracy requirements embedded in the Training Package qualifications.

9.2 Staff training/professional development

Several reports produced last year focused on the need for formal staff development and professional training in relation to language, literacy and numeracy and Training Packages (Trenerry 2000: 24; McQuirk: 1999: 53). A positive example described a training organisation which conducted workshops with assessors and trainers with regard to the language, literacy and numeracy requirements embedded in Training Package qualifications (Sanguinetti and Bradshaw 2000: 22). Many printed and Internet resources for professional development are available, and funds are available through *Framing the Future* for professional development. *Framing the Future* is a national staff development initiative funded by the Australian National Training Authority (ANTA).

In this research however, there was little discussion of staff training or professional development linking language, literacy and numeracy with Training Packages. In most of the campuses interviewed no extra training or professional development had been undertaken as a result of the introduction of Training Packages. For example, in Case Study 1A, the language, literacy and numeracy specialists involved in CAVSS had not received any training or professional development in relation to Training Package implementation, as there had been no time prior to the delivery of the program.

Not only had there been no professional development activities that focussed on language, literacy and numeracy requirements for trade

areas, but language, literacy and numeracy specialists were equally ill-informed about embedded language, literacy and numeracy competencies. In Case Study 2C, one of the language, literacy and numeracy specialists who was team teaching did not know whether her co-vocational skills lecturer was delivering a Training Package qualification or not. In a rarer case, in Case Study 2B, a program manager did not know what a Training Package was, and whether her lecturers were delivering qualifications contained in them.

In the majority of interviews it was not evident that those with management responsibility for areas dealing with language, literacy and numeracy skills training had good knowledge of the requirements of Training Package qualifications, or the part they could play in the provision of advice on language, literacy and numeracy skills.

9.3 Responsibility for delivery of language, literacy and numeracy training

A number of views were expressed in the case studies as to who should be teaching language, literacy and numeracy skills. In Case Study 1A, a program manager from the childcare area felt that as they were all trained teachers, they could be teaching language, literacy and numeracy skills themselves. On this basis, they declined an offer of assistance from the language, literacy and numeracy specialists which was offered because of the childcare program's high attrition rates. This view was not widely held, and it was reported that the programs which had teacher trained people in them, were generally most supportive of the work of the specialists.

In other areas the view was expressed that once CAVSS funding was finished, then the lecturers would look at providing language, literacy and numeracy skills training themselves. In some courses, the only training available was the remedial teaching done by vocational lecturers, funded out of existing funds. In Case Study A1, the language, literacy and numeracy director felt that some program areas gave the teaching of language, literacy and numeracy skills little credibility and thought, therefore, that anyone could teach them. In Case Study 3, the language, literacy and numeracy specialists were critical of the fact that communication skills were being delivered by lecturers in retail and childcare. However, in Case Study A1, a vocational program manager, who was also a language, literacy and numeracy specialist, stated that she

preferred her lecturers to deliver communication skills. While she preferred to use people with both areas of expertise to deliver language, literacy and numeracy skills training, if she didn't have these people on her staff, then it was better that people with vocational skills did the training. Her reasoning was that language, literacy and numeracy skills were always particular to an industry in terms of technical expertise, and that language and students were more easily 'engaged' in industry-specific activities.

In Case Study 1A, language, literacy and numeracy specialists delivering the Certificate of General Education for Adults (CGEA) thought that they could be delivering the language, literacy and numeracy skills required in most Training Package qualifications. The director in this area thought that, in an ideal world, her preferred delivery model would be to locate a language, literacy and numeracy specialist within each program area.

10 Key issues from the research

10.1 Measuring outcomes

The non-endorsed components of Training Packages encourage innovation on the part of Registered Training Organisations. This means that a variety of ways of incorporating language, literacy and numeracy skills training are currently being trialed. However, our research found that little effort is being made by Registered Training Organisations to record the success or otherwise of their language, literacy and numeracy training activities. Research conducted in 1999 also found that quality control was lacking in the language, literacy and numeracy projects that they surveyed. It would suggest that training providers be encouraged to record the outcomes of language, literacy and numeracy skills training measures through the establishment of performance criteria.

One of DETYA's main aims in establishing the ALNARC centres is to develop a research culture in relation to the promotion of language, literacy and numeracy skills. In this research project, quantitative and qualitative measures were not available to assess the effectiveness of different ways to address language, literacy and numeracy skills training. Where different approaches were being trialed there were no performance measures in place to assess the success or otherwise of the program. A typical approach seemed to be to "talk to students and staff to see how things went". This clearly makes the promotion of certain approaches over others very difficult.

At present, the co-operation and sharing of information between registered training organisations occurs mainly informally. Without data measuring the success of programs which deliver language, literacy and numeracy skills training, the sharing of information is limited. It could lead to good approaches being ignored while other approaches are advocated for the wrong reasons. The nature of delivery, the differences between students, Registered Training Organisations, industries and Training Packages, will always mean that a variety of options are necessary, and what does not work in one circumstance may work in another. However, good quality information and research would make the selection of approaches less haphazard.

The paucity of data and lack of performance measures in general in the area of language, literacy and numeracy means that this skills-training area lacks a sound basis upon which new initiatives can be built. For example, although the researchers found that many (but not all) program

managers thought low levels of language, literacy and numeracy skills were linked to high attrition rates, there was no data available at the institution level to support this view.

Establishing a basis for assessing the success of the training program seemed to be regarded favourably by program managers, however, time, or rather timing, often made it a difficult process to establish. For example, the workplace trainer in Case Study 5 regarded her program as hugely successful and regretted that she had not had the time to develop a "before and after picture" to celebrate the success of the program to her company, and as an exemplary program to others. In her case, there was very little time between her appointment and the commencement of the program. The Human Resource manager expressed the same regret, saying that one of the measures that she had observed and attributed to enhanced communication skills was a reduction in the number of visits to her office to resolve conflicts. She now regretted not making a note of the number of visits before, during and after the training.

It should be possible to establish a range of examples of such performance measures together with proforma documentation, so that management and trainers can establish a credible basis for assessing the success or otherwise of their approaches. Research would need to be done to establish and promote performance measures that are feasible and relevant, as well as simple to establish and monitor.

It is recommended that responsible National and State agencies develop ways (including examples and proformas) to encourage registered training organisations to establish performance measures for the delivery of language, literacy and numeracy skills training.

10.2 The advantages of co-operation

A senior manager in Case Study 3 believed that having language, literacy and numeracy support available on campus gave them a competitive edge over smaller training providers. The competitive edge is a crucial aspect of the current training environment. However, now that the training pendulum has swung 100% towards competition, it may be time to consider the benefits of select co-operation in discrete areas. In the language, literacy and numeracy area where many approaches are being trialed and where generic approaches are possible, this is particularly true. One senior language, literacy and numeracy specialist stated that she

benefited immensely from the relationship she had developed with the RTOs with which she was not directly in competition. She was referring to those institutions in different regions to her own. She felt that all training would benefit from more co-operation.

The interviews suggest that co-operation, information sharing, and skill sharing between the following areas has the most potential to increase the quality and quantity of language, literacy and numeracy skills training at this early and difficult stage of dealing with integrated language, literacy and numeracy competencies. Co-operation, information sharing and skill sharing could be encouraged between:

- registered training organisations;
- language, literacy and numeracy, and other program areas;
- similar program areas in different registered training organisations; and
- between individual staff members.

One of the reasons to improve the co-operation between areas is that, where language, literacy and numeracy issues are treated as a student issue rather than a course issue, then, in some areas, only small numbers of students are identified as needing language, literacy and numeracy support. Some of the programs indicated that the numbers in their courses, in general, were too small to deliver a tailored response in a cost-effective manner.

Another reason for improving co-operation is that a number of unlike program areas have natural affinities due to the underpinning skills necessary for their area. An example would be areas which have similar underpinning numeracy skills, yet are as different as, say, business and information technology. The competitive training environment requires that the sharing of ideas and outputs is targeted to areas which enhance efficiency, without reducing the competitive edge. Some of the situations arising from the interviews where co-operation, including resource sharing, would be most beneficial are listed below.

- Different RTOs which have common problems, such as low participation levels of students in science and maths related subjects. One program manager stated that numeracy was an area where co-operation could be productive, particularly in relation to generic surveying and generic underpinning skills. He was hopeful that it would be possible to establish areas of co-operation between different training providers.
- Situations where only small numbers of students are flowing through from the lower certificate levels, making it difficult to

address additional language, literacy and numeracy support economically.

- The collaboration of language, literacy and numeracy specialists with other lecturers on the delivery of skills training for Training Package competencies.

It is recommended that the advantages of a range of co-operative models that enable effective and efficient delivery of the language, literacy and numeracy requirements of Training Package qualifications be promoted.

50

11 Closing remarks

Before commencing this project the project leaders agreed that:

> *The project will not attempt to judge whether the models are successful modules. It will simply describe the models that have been adopted and the critical decisions that were made when program managers moved from one system to the new.*

As the report has discussed, in many cases, arrangements to address the language, literacy and numeracy requirements of Training Packages were still being trialed, were at a very early stage of development, or simply did not exist. The researchers found that, in general, training providers were very aware of the literacy, language and numeracy needs of their students. However, they were not so aware of the ways in which language, literacy and numeracy skills had been built into Training Package qualifications, or that they should be addressing these skills in their training delivery.

Too frequently in interviews the researchers heard the comment that without language, literacy and numeracy 'support' students are "being set up to fail". It was also admitted that, where these skills were being addressed, "we could do it better".

The perceived reasons for not being able to address these requirements within the delivery of the Training Package qualification were given as 'time' and 'funds'. The interviews suggest two possible contexts for this response. The first is that lecturers perceive that there is a greater demand from their students for language, literacy and numeracy skills than they can provide within the teaching of a Training Package qualification. This is suggested also in the view that there is "a huge unmet" demand for language, literacy and numeracy skills training (Case Study 4). Without effective record-keeping and appropriate methods of identification, the potential numbers requiring additional/foundation language, literacy and numeracy assistance in specific programs is impossible to assess. At the national level, two surveys have established that at least 50% of TAFE students can be expected to have literacy skills gaps that seriously impact on their learning[9].

The second context is that lecturers are adopting more student support approaches than course-centred approaches (as the diagram on p. 32 shows). This suggests that they are not aware of the ways in which language, literacy and numeracy has been (and can be) "built-in to the delivery of the Training Package qualification".

Generally, there appears to be some confusion between addressing the requirements of the course and the requirements of individual students with particular skills gaps. If both are to be addressed there may need to be some mechanism for assessing the language, literacy and numeracy levels of incoming students. It may be, for example, that certain cohorts of students[10] have low language, literacy and numeracy levels, which indicate that they need extra support. Only surveys accurately assessing skills will indicate whether extra time and funds need to be found. The work being done on surveying students' language, literacy and numeracy levels is one way to establish these skill levels.

52

12 Recommendations

- The misconception that language, literacy and numeracy skills training could not be addressed within existing funding allocations came up frequently in interviews. Information and advice from the Department of Training and Employment on ways that this can be achieved would be beneficial.
- It is recommended that selected institutions be encouraged to survey incoming students — post-enrolment but pre-Training Package qualification delivery — to measure language, literacy and numeracy skill levels. In those cases where such surveys had been conducted, the feedback was that it alerted lecturers to language, literacy and numeracy requirements early in the course, and was helpful in the management and planning of language, literacy and numeracy resources. Having such data would also enable RTOs over time to determine relationships between various inputs (such as the allocation of language, literacy and numeracy specialist resources) and the resulting outputs.
- The findings from this project suggest that there is still a need to raise awareness of the requirement to address language, literacy and numeracy skills within the delivery of Training Package qualifications.
- The CAVSS pilot program in Western Australia provides useful insights into ways that collaboration between language, literacy and numeracy areas and other program areas can result in effective training services that meet students' language, literacy and numeracy needs. The benefits of this integrated approach in addressing the language, literacy and numeracy requirements of Training Package qualifications should be promoted to and within Registered Training Organisations.
- It is suggested that the work being done in the workplace in Case Study 5 be documented in leaflet format and disseminated, in order to promote the benefits to employees and employers of providing language, literacy and numeracy skills training where Training Package qualifications are being delivered in the workplace.
- It is recommended that responsible National and State agencies develop ways (including examples and proformas) to encourage

registered training organisations to establish performance measures to assess the quality and success of the delivery of language, literacy and numeracy skills in Training Package qualifications.

- In addition it is suggested that a case study analysis of the delivery of a specified Training Package qualification by different training providers would be productive. The case study would test the relationship between different training providers' interpretations of the language, literacy and numeracy requirements of the qualification, and highlight differences in the provision of language, literacy and numeracy skills training. Successful training models could then be promoted and would benefit those experiencing difficulties in the delivery and assessment of language, literacy and numeracy skills.
- It is recommended that areas of co-operation in relation to the delivery of the language, literacy and numeracy requirements of Training Package qualifications be promoted.

13 Appendix 1: Interview questions

Questions for academic directors

- Could you tell me about your induction program for program managers? Did it involve much discussion with staff about the changes in literacy and numeracy skills development and assessment?
- What is your turnover rate for program managers? Do you have any data that documents this?
- Have you made any attempt to promote a particular approach to literacy and numeracy? Could you tell me why you adopted this approach/model?
- Can you tell me about whether the CMIS affects your decisions regarding course provision?
- Can you tell me whether the Module Load Completion Rate has affected your decisions regarding literacy and numeracy provision? Have you ever been penalised?
- Are there any other reporting requirements or audits that might affect the decisions you make regarding literacy and numeracy provision?

Questions for program managers

- When you changed to Training Packages, how did you decide which literacy and numeracy skills were relevant to each of the modules?
- Did you ask for any help? Of whom?
- How did you allocate responsibilities for course delivery? Who did you allocate literacy and numeracy skills development and assessment to?
- Did you decide to stay with the 1 lecturer per 1 module? Or was it possible to say I have lecturers with X and Y skills and to 'mix and match' them? (Does this affect your tracking of funding?)
- Why did you do it in this way?

Questions for both program managers and academic directors

- What funding/financial considerations impact upon your decisions? Is there any available data that illustrates why these considerations were important?
- In what ways did human resource considerations (e.g. availability/cost of staff) influence the literacy and numeracy provision model that has been adopted?
- Did time-tabling considerations influence your decisions to adopt a particular model?
- What other factors influenced your decision to adopt this model?
- Have any strengths/difficulties surfaced since the model was introduced?
- If you have experienced any problems, can you tell me how you solved these problems?
- If you get it wrong in the first instance, when/where/how will this show up?
- Do you have any data at all on what effect the model is having on student outcomes at this stage?
- Have you decided what measures/data you will use to determine the effect of the model on student outcomes in the future?
- Is the model part of organisational policy or does it operate informally?
- Is staff aware of the existence of the new organisational model?
- How did they find out?
- Who conveyed the message?
- Do you have any senior staff who are 'champions' of language, literacy and numeracy skills development in your organisation? Is this part of their formal organisational responsibility?
- Do you have an Applied Vocational Study Skills Pilot operating at your college?
- What relationship do you see between the pilot and meeting the literacy and numeracy requirements of modules?
- Will the outcome of the pilot influence your decisions regarding literacy and numeracy provision in the future?

14 Appendix 2: Summary of language, literacy and numeracy issues

Training Package/s	Main areas of concern
Case Study 1	
Telecommunications	*Numeracy*
Community Services	*Writing skills*
Gas Industry	*ESL, Communication (in Package)*
Financial Services	*Language, literacy and numeracy*
Electrotechnology Industry	*Numeracy*
Printing and Graphic Arts	*Language, literacy and numeracy*
Case Study 2	
Electrotechnology Industry	*Numeracy*
Civil and General Construction	*Language, literacy and numeracy*
Financial Services	*ESL and numeracy*
Transport and Distribution	*Language, literacy and numeracy*
Hospitality	*Language, literacy and numeracy*
Information Technology	*Numeracy*
Community Services	*Literacy (writing skills)*
Tourism	*Language, literacy and numeracy*
Case Study 3	
Metals and Engineering	*Language, literacy and numeracy*
Civic and General Construction	*Writing skills*
Hospitality	*Numeracy and study skills*
Case Study 4	
Hospitality	*Language, literacy and numeracy*
Case Study 5	
Food Processing Industry	*Communication, ESL*
Case Study 6	
Extractive industry	*Communication*
Case Study 7	
Hospitality	*ESL, literacy*

15. Appendix 3: Units of Competence (in Training Packages discussed)

Units of Competence: Communications units (examples only)

Building and Construction:	*Communicate essential information*
Community Services:	*Communicate with people accessing the services of the organisation* *Communicate appropriately with clients and colleagues* *Communicate with children* *Communicate with family members about their child*
Financial Services:	*Communicate in the workplace*
Food Processing Industry:	*Communicate in the workplace*
Hospitality Industry:	*Communicate on the telephone*
Information Technology:	*Communicate in the workplace*
Printing and Graphic Arts:	*Communicate in the workplace*

Units of Competence: Reading and Writing units (examples only)

Building and Construction:	*Read/interpret plans and specifications* *Write routine texts in the workplace*
Civil and General Construction:	*Read and interpret plans*
Gas Industry:	*Read and record meter readings*
Hospitality Industry:	*Design, plan and write menus*
Information Technology:	*Receive and process oral and written communication*
Metal and Engineering Industry:	*Write reports*
Telecommunications — Drafting:	*Read and interpret drawings and sketches.*

Units of Competence: Numeracy units (examples only)

Community services:	*Manage the organisation's finances, accounts and resources* *Produce financial statements*
Financial Services:	*Reconcile and monitor accounts receivable*
Food Processing Industry:	*Apply basic mathematical concepts*
Metal and Engineering Industry:	*Perform mathematical computations*
Telecommunications:	*Provide basic assistance to customers in relation to account enquiries.*

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16 Notes

1 This report concurs with the 1999 ALNARC research which found "considerable variation in the quality and quantity of provision. There are several instances where little or no attention is being paid to literacy and numeracy" (Sanguinetti and Hartley, 2000:1).

2 Pat Millar & Ian Falk in their study, *Communication and Catering Competencies*, note that "In most units...description of literate and numerate activities is not specified in the detail that reflects on the job performance, and some units are cursory in their inclusion of literacy and numeracy competencies" (p. 24).

3 The draft *Business Rules for CAVSS* also refers to this "misunderstanding" stating that "CAVSS is intended to provide support...where skills gaps are affecting student performance rather than to replace the teaching of core vocational skills related to communication and maths" (pp. 2-3).

4 Throughout this report 'trade' refers to the areas which traditionally provided training for apprenticeships, examples include construction and metals. In this report 'vocation' refers to all program areas other than General Studies. The General Studies area, in all instances covered by this report, is the area with designated responsibility for the delivery of language, literacy and numeracy skills training to TAFE trainees.

5 As Pat Millar and Ian Falk comment the term 'underpin' does not have specific definition in Training Packages, p. 35.

6 In their overview of the State ALNARC reports, Sanguinetti and Hartley note that "several reports indicate that trainers are using materials and methods used under the previous curriculum-based system". They note the South Australia comment that this may only be appropriate for experienced trainers, p. 30.

7 The national term is the Module Load Completion Rate (MLCR) and it measures and penalises registered training organisations for higher than average attrition rates in their programs. The State MLCR is used for college performance rates at a national level. Western Australia's MLCR has been modified with respect to the financial negotiations between the colleges and the Department of Training and Employment. The modified state version is called

the Module Load Output Rate (MLOR).

8 Certain groups of trainees such as those with disabilities are not included in the MLOR.

9 Wickert, Rosie (1989) *No Single Measure*, AGPS, Canberra and ABS, *Aspects of Literacy: Assessed Skills Levels*, Australia, 1999.

10 Ann Kelly and Jean Searle point out that if a worker is assessed as 'technically' competent it is assumed he/she has the associated literacy competencies and, secondly, it is assumed that workers have the language, literacy and numeracy skills to access training, p. 43.

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